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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,045	11/30/2000	Bernd Bruchmann	51035	8697

26474 7590 11/19/2002

KEIL & WEINKAUF  
1350 CONNECTICUT AVENUE, N.W.  
WASHINGTON, DC 20036

EXAMINER
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KUMAR, PREETI

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 11/19/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/726,045

Applicant(s)

BRUCHMANN ET AL.

Examiner

Preeti Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6, 8 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6, 8, 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Claims 6, 8, 11-13 are pending.
2. The rejection of claims 6, 8, and 11-13 under 35 U.S.C. 103(a) as being unpatentable over Matsuda et al. (US 4,008,196) is maintained and further explained below.
3. The rejection of claims 6, 8, and 11-13 under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 4,180,491) is maintained and further explained below.

### ***Response to Arguments***

4. Applicant's arguments filed September 3, 2002 in paper # 8, have been fully considered but they are not persuasive.

Specifically regarding the argument that Matsuda et al. do not teach a process for modifying compounds or surfaces by causing them to react with a polyfunctional isocyanate such as instant compound (1), the examiner has taken into consideration the diisocyanates clearly illustrated in the table on page 11 and page 6 lines 13-30 of the Applicant's specification. The examiner asserts that Matsuda et al. teach a process for reacting an isocyanate-terminated urethane prepolymer with an excess of a polyalkylene polyamine to form a polyurethane-urea-polyamine. Specifically, the polyurethane-urea-polyamine used in this invention is obtained by reacting an isocyanate-terminated urethane polymer, which is prepared from a polyhydroxyl compound and an excess of polyfunctional isocyanate. See col.2, lines 4-9. Matsuda et al. also teach the following method for introducing a long-chain alkyl group into the

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polyurethane-urea-polyamine by reacting a part of the amino groups (primary and secondary amino groups) in the polyurethane-urea-polyamine molecule with a long-chain alkyl isocyanate (including an alkyl isocyanate derived from 1 mole of a long-chain alcohol and 1 mole of a diisocyanate) having an alkyl group of 12 to 22 carbon atoms or with an alpha-olefin epoxide having from 12 to 22 carbon atoms in the molecule. See col.4, ln.40-50.

The examiner acknowledges that the teachings of Matsuda et al. do not specifically teach a monoisocyanate as required by the instant claim 6, however, Matsuda et al. do teach same process of reacting a isocyanate with an isocyanate reactive group such as alcohols. The claims differ from the Matsuda et al. reference only by employing a new isocyanate as the starting material. However the starting materials are analogous in that they are both isocyanates. One having ordinary skill in the art would have been motivated to employ the process of the prior art with the expectation of obtaining the desired product because one would expect the analogous starting materials to react similarly. It has been held that application of an old process to a new and analogous material to obtain a result consistent with the teachings of the art would have been obvious to one having ordinary skill. A new process may still be obvious even when considered as a whole notwithstanding that the specific starting material or resulting product or both are not found in the prior art. *In Re Durden* 226 USPQ 359.

Specifically regarding the argument that the polymers taught by Kim et al. do not contain any free isocyanate groups is also not found persuasive. When reaction with

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monoisocyanate is carried out, there can be no free NCO groups remaining therefore the arguments are not found to be persuasive. Also, applicant's claims do not call for a nonreactive group after the reactive process is completed. Kim et al. is a pertinent and logically sound references because Kim et al. teach polyurethane thickeners prepared in non-aqueous media and are the reaction products of certain combinations of the following reactants: (a) at least one water soluble polyether polyol; (b) at least one water insoluble organic diisocyanate; (c) at least one water insoluble organic polyisocyanate containing three or more isocyanate groups; (d) at least one hydrophobic organic monofunctional active hydrogen compound; (e) at least one hydrophobic organic monoisocyanate; and (f) at least one polyhydric alcohol or polyhydric alcohol ether, containing three or more hydroxyl groups. See col.3, ln.57-col.4, ln.13. Further more, in example 40, col.18, Kim et al. teach the formation of polybranched polymers from a reaction of polyethylene glycol and octadecyl isocyanate.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

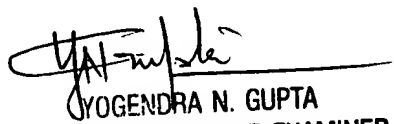
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 703-305-0178. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on 703-308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-872-9309.

Preeti Kumar  
Examiner  
Art Unit 1751

PK  
November 14, 2002

  
YOGENDRA N. GUPTA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700